

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OCD Hobbs

FORM APPROVED
OMB NO. 1004-0135
Expires: July 31, 2010**SUNDRY NOTICES AND REPORTS ON WELLS**
*Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals.***SUBMIT IN TRIPLICATE - Other instructions on reverse side.**5. Lease Serial No.
NMNM16353

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.

8. Well Name and No.
OUTRIDER FEDERAL 6H9. API Well No.
30-025-4293210. Field and Pool, or Exploratory
WC-025 G-06 S253306M; BS11. County or Parish, and State
LEA COUNTY, NM

1. Type of Well

☒ Oil Well ☐ Gas Well ☐ Other2. Name of Operator
XTO ENERGY, INCContact: STEPHANIE RABADUE
E-Mail: stephanie_rabadue@xtoenergy.com3a. Address
500 W. ILLINOIS ST STE 100
MIDLAND, TX 797013b. Phone No. (include area code)
Ph: 432-620-6714

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

Sec 27 T24S R32E Mer NMP

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	Change to Original A
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	PD

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

XTO Energy, Inc respectfully requests the following changes to the drilling program originally submitted with the APD:

1. Add pilot hole.
2. Maintain continuity of casing weight in intermediate string.

An updated drilling plan is attached with pilot hole datum and the changes to the intermediate casing to use 40# from surface to the base of the intermediate string.

**SEE ATTACHED FOR
CONDITIONS OF APPROVAL**

14. I hereby certify that the foregoing is true and correct.

**Electronic Submission #323333 verified by the BLM Well Information System
For XTO ENERGY, INC, sent to the Hobbs
Committed to AFMSS for processing by LINDA JIMENEZ on 11/13/2015 ()**

Name (Printed/Typed) STEPHANIE RABADUE

Title REGULATORY ANALYST

Signature (Electronic Submission)

Date 11/12/2015

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By

Title

APPROVED
Kenneth Rennick

Date

DEC - 4 2015

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office

PETROLEUM ENGINEER
BUREAU OF LAND MANAGEMENT
CARLSBAD FIELD OFFICE

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make any statement or representation to any agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

**** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ******JAN 06 2016**



Rennick, Kenneth <krennick@blm.gov>

Outerider Federal 6H Revised APD - 9-5/8" casing design

3 messages

Farmar, Logan <Logan_Farmar@xtoenergy.com>

Wed, Dec 9, 2015 at 12:04 PM

To: "Kenneth Rennick (krennick@blm.gov)" <krennick@blm.gov>

Cc: "efernand@blm.gov" <efernand@blm.gov>, "Turner, Weston" <Weston_Turner@xtoenergy.com>

Kenneth,

In the revised APD, somehow the 9-5/8" intermediate casing design got changed to all 40# J-55. In the original approved APD, we had our string designed with 3500' of 36# J-55, then switching to 40# J-55 from 3500' to TD at 4875'. What process do we need to go through to enable us to run our originally approved design?

Thanks,

Logan Farmar*Drilling Engineer* | Permian District

C: 432.234.9872 O: 432.620.4377

Logan_Farmar@xtoenergy.com

An **ExxonMobil** Subsidiary

Rennick, Kenneth <krennick@blm.gov>

Wed, Dec 9, 2015 at 12:26 PM

To: "Farmar, Logan" <Logan_Farmar@xtoenergy.com>

Cc: "efernand@blm.gov" <efernand@blm.gov>, "Turner, Weston" <Weston_Turner@xtoenergy.com>

Fortunately, I have not had the time to send out the official copies. So please just email the correct drilling program, and I will switch it out with the last one you sent.

Again, please only send a PDF version so that it will be received. I do not want it to be hold-up due to objectionable words...

The COA that I sent for the sundry notification still applies.

Thank You Greatly!!

Best Regards,

Kenneth Rennick

[Quoted text hidden]

—
Kenneth Rennick

Petroleum Engineer
Bureau of Land Management
Carlsbad Field Office
(575) 234-5964
krennick@blm.gov

Admin, BLM SPAM <blm-spam-admin@doi.gov>

Thu, Dec 10, 2015 at 2:07 PM

To: "Rennick, Kenneth" <krennick@blm.gov>, "efemand@blm.gov" <efemand@blm.gov>

This email was blocked by the spam filter for objectionable words and after review is being released. Please do not reply back to this email as it will go to the Spam box.

IT Security

Continuous Monitoring
BLM, IRM, IT Security Division (WO-840)

----- Forwarded message -----

From: **Farmar, Logan** <Logan_Farmar@xtoenergy.com>

Date: Wed, Dec 9, 2015 at 1:15 PM

Subject: [BLM Objectionable Words] RE: Outrider Federal 6H Revised APD - 9-5/8" casing design

To: "Rennick, Kenneth" <krennick@blm.gov>

Cc: "efemand@blm.gov" <efemand@blm.gov>, "Turner, Weston" <Weston_Turner@xtoenergy.com>

The sundry notification states we will run 40# from surface to TD (4875'). Can you please confirm our string of 36# J-55 to 3500' then 40# to 4875' is approved?

Thanks,

Logan Farmar

Drilling Engineer | Permian District

C: 432.234.9872 O: 432.620.4377

Logan_Farmar@xtoenergy.com



An **ExxonMobil** Subsidiary

From: Rennick, Kenneth [mailto:krennick@blm.gov]
Sent: Wednesday, December 09, 2015 1:26 PM
To: Farmar, Logan
Cc: efernand@blm.gov; Turner, Weston
Subject: Re: Outrider Federal 6H Revised APD - 9-5/8" casing design

[Quoted text hidden]



Outrider Federal 6H BLM Drilling Program rev.Pilot Hole.pdf

33K



Rennick, Kenneth <krennick@blm.gov>

Fwd: [BLM Objectionable Words] XTO - Outrider Federal 6H revised drilling plan

1 message

Admin, BLM SPAM <blm-spam-admin@doi.gov>

Mon, Dec 7, 2015 at 2:43 PM

To: "Kenneth Rennick (krennick@blm.gov)" <krennick@blm.gov>, "efernand@blm.gov" <efernand@blm.gov>

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IT Security

Continuous Monitoring

BLM, IRM, IT Security Division (WO-840)

----- Forwarded message -----

From: **Farmer, Logan** <Logan_Farmer@xtoenergy.com>

Date: Fri, Dec 4, 2015 at 9:37 AM

Subject: [BLM Objectionable Words] XTO - Outrider Federal 6H revised drilling plan

To: "Kenneth Rennick (krennick@blm.gov)" <krennick@blm.gov>

Cc: "efernand@blm.gov" <efernand@blm.gov>

Kenneth,

Attached is the revised drilling plan for the Outrider Federal 6H reflecting the following changes we discussed yesterday:

- Revised plug designs for the pilot hole (Section 4)
- 5M system below the intermediate casing (Section 5) – diagram attached
- Request to use centralizers only in the curve on the production casing string (Section 3)

Please let me know if you have any questions.

Thanks,

Logan Farmer*Drilling Engineer* | Permian District

C: 432.234.9872 O: 432.620.4377

Logan_Farmer@xtoenergy.com



An **ExxonMobil** Subsidiary

2 attachments



Outrider Federal 6H BLM Drilling Program rev.Pilot Hole.doc
70K



BOP Choke Manifold Diagrams Outrider Federal 6H.pdf
101K

**Outrider Federal 6H
30-025-42932
XTO Energy, Inc
Conditions of Approval**

Original COA still applies except for the addition of a pilot hole and a drilling mud weight sections due to penetrating the 3rd Bone Springs. As well as the replacement of the conditions for lateral centralizers and the pressure control section. See the following:

A. PILOT HOLES

Pilot hole is required to have a plug at the bottom of the hole. As well as a plug that covers the top of Wolfcamp at 12,213-feet which this plug needs to be tagged and witnessed by the BLM. The BLM is to be contacted, (575) 393-3612, at least 24-hours prior to the tagging of Wolfcamp plug. All plugs shall be Class H Cement. The lengths of the proposed plugs are appropriate as proposed.

B. CENTRALIZERS

Centralizers approved as proposed by operator.

C. PRESSURE CONTROL

1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2 and API 53.
2. Variance approved to use flex line from BOP to choke manifold. Check condition of flexible line from BOP to choke manifold, replace if exterior is damaged or if line fails test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be onsite for review. These documents shall be posted in the company man's trailer and on the rig floor. If the BLM inspector questions the straightness of the hose, a BLM engineer will be contacted and will review in the field or via picture supplied by inspector to determine if changes are required (operator shall expect delays if this occurs).

3. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **5000 (5M) psi**.
4. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
 - a. In a water basin, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. The casing cut-off and BOP installation can be initiated four hours after installing the slips, which will be approximately six hours after bumping the plug. For those casing strings not using slips, the minimum wait time before cut-off is eight hours after bumping the plug. BOP/BOPE testing can begin after cut-off or once cement reaches 500 psi compressive strength (including lead when specified), whichever is greater. However, if the float does not hold, cut-off cannot be initiated until cement reaches 500 psi compressive strength (including lead when specified).
 - b. The tests shall be done by an independent service company utilizing a test plug **not a cup or J-packer**.
 - c. The test shall be run on a 5000 psi chart for a 2-3M BOP/BOP, on a 10000 psi chart for a 5M BOP/BOPE and on a 15000 psi chart for a 10M BOP/BOPE. If a linear chart is used, it shall be a one hour chart. A circular chart shall have a maximum 2 hour clock. If a twelve hour or twenty-four hour chart is used, tester shall make a notation that it is run with a two hour clock.
 - d. The results of the test shall be reported to the appropriate BLM office.
 - e. All tests are required to be recorded on a calibrated test chart. **A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.**
 - f. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug. This test shall be performed prior to the test at full stack pressure.
 - g. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the **3rd Bone Spring** formation if the time between the setting of the intermediate casing and reaching this depth exceeds 20 days. This test does not exclude the test prior to drilling out the casing shoe as per Onshore Order No. 2.

D. DRILLING MUD

Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be operating before drilling into the 3rd **Bones Spring** formation and the **Wolfcamp** formation, and shall be used until production casing is run and cemented.

Proposed mud weight may not be adequate for drilling through the 3rd **Bones Spring** formation and the **Wolfcamp** formation.

KGR 12042015

DRILLING PLAN: BLM COMPLIANCE
(Supplement to BLM 3160-3)

XTO Energy Inc.
Outrider Federal 6H
Projected TD: 15615' MD / 10920' TVD
SHL: 170' FNL & 2115' FWL, SECTION 27, T24S, R32E
BHL: 170' FSL & 1955' FWL, SECTION 27, T24S, R32E
Lea County, NM

1. GEOLOGIC NAME OF SURFACE FORMATION:

A. Permian

2. ESTIMATED TOPS OF GEOLOGICAL MARKERS & DEPTHS OF ANTICIPATED FRESH WATER, OIL OR GAS:

Formation	Well Depth (TVD)	Water / Oil / Gas
Rustler	1012'	Water
Top of Salt	1315'	
Base of Salt	4634'	
Delaware	4859'	Water
Brushy Canyon	7350'	Water/Oil/Gas
Bone Spring	8772'	Water/Oil/Gas
1 st Bone Spring Ss	9883'	Water/Oil/Gas
2 nd Bone Spring Ss	10440'	Water/Oil/Gas
Target/Land Curve	10920'	Water/Oil/Gas
3 rd Bone Spring Ss	11783'	Water/Oil/Gas
Wolfcamp	12213'	Water/Oil/Gas
Pilot Hole TD	12700'	Water/Oil/Gas

*** Hydrocarbons @ Brushy Canyon

*** Groundwater depth 200' (per NM State Engineers Office).

1100

No other formations are expected to yield oil, gas or fresh water in measurable volumes. The surface fresh water sands will be protected by setting 13-3/8" casing @ 1075' above the salt and circulating cement back to surface. The salt will be isolated by setting 9-5/8" casing at 4875' and circulating cement to surface. An 8-3/4" pilot hole will be drilled into the Wolfcamp. It will then be plugged back. An 8-3/4" curve and lateral hole will be drilled to MD/TD and 5-1/2" casing with sliding frac sleeves will be set at TD and cemented back 500' into the 9-5/8" casing shoe.

3. CASING PROGRAM:

SEE COA (ORIGINAL)

Hole Size	Depth	OD Csg	Weight	Collar	Grade	New/Used	SF Burst	SF Collapse	SF Tension
17-1/2"	0' - 1075' 1100	13-3/8"	48#	STC	H-40	New	4.33	1.50	6.24
12-1/4"	0' - 3500'	9-5/8"	36#	LTC	J-55	New	1.68	1.16	2.50
	3500' - 4875'	9-5/8"	40#	LTC	J-55	New	1.88	1.36	9.45
8-3/4"	0' - 15615'	5-1/2"	17#	BTC	P-110	New	1.12	1.46	2.14

SEE COA

- XTO requests to utilize centralizers only in the curve after the KOP and only a minimum of one every other joint.

WELLHEAD:

- A. Starting Head: 13-5/8" 3000 psi top flange x 13-3/8" SOW bottom
- B. 'B' Section/ Drilling Spool: 13-5/8" 3000psi bottom flange x 11" 5M top flange
- C. Tubing Head: 11" 5000psi bottom flange x 7-1/16" 10,000psi top flange

4. CEMENT PROGRAM:

- A. **Surface Casing:** 13-3/8", 48#, NEW H-40, STC casing to be set at $\pm 1075'$.

Lead: 20 bbls FW, then 635 sx ExtendaCem-CZ (mixed at 13.7 ppg, 1.68 ft³/sk, 8.72 gal/sx wtr)

Tail: 305 sx HalCem-C + 2% CaCl (mixed at 14.8 ppg, 1.35 ft³/sk, 6.39 gal/sx wtr)
***All volumes 100% excess in open hole. Cement to surface.

- B. **Intermediate Casing:** 9-5/8", 36#/40#, NEW J-55, LTC casing to be set at $\pm 4875'$.

Lead: 20 bbls FW, then 1450 sx EconoCem-HLC + 5% salt + 5 lbm/sk Kol-Seal (mixed at 12.9 ppg, 1.88 ft³/sk, 9.61 gal/sx wtr)

Tail: 250 sx HalCem-C (mixed at 14.8 ppg, 1.33 ft³/sk, 6.34 gal/sx wtr)
***All volumes 100% excess in open hole. Cement to surface.

- C. **Pilot Hole:** 8-3/4" open hole

Plug 1: 12700'-12000'

406 sx HalCem-H (mixed at 16.4 ppg, 1.08 ft³/sk, 4.52 gal/sx wtr)

Plug 2: 10600' - 10050'

360 sx HalCem-H + 0.5% CFR-3 + 0.2 HR-601 (mixed at 17.0 ppg, 0.95 ft³/sk, 3.52 gal/sx wtr)
***All volumes 50% excess in open hole.

- D. **Production Casing:** 5-1/2", 17#, NEW P-110, BTC casing to be set at $\pm 15615'$. Casing will be cemented and will include sliding sleeves for the completion.

Lead: 20 bbls FW, then 625 sx Tuned Light + 0.5 lbm/sk CFR-3 + 1.5 lbm/sk salt + 0.1% HR601 (mixed at 10.5 ppg, 2.69 ft³/sk, 12.26 gal/sx wtr)

Tail: 1245 sx VersaCem PBHS2 + 0.5% LAP-1 + 0.25 lbm/sk D-air 5000 + 0.2% HR 601 + 0.4% CFR-3 + 1 pps Salt (mixed at 13.2 ppg, 1.61 ft³/sk, 8.38 gal/sx wtr)
***All volumes 30% excess in open hole. Planned top of cement 500' into intermediate casing shoe

5. PRESSURE CONTROL EQUIPMENT:

The blow out preventer equipment (BOP) for this well consists of a 13-5/8" minimum 5M Hydril and a 13-5/8" minimum 5M Double Ram BOP. Max bottom hole pressure of the pilot hole should not exceed 6400 psi. Max bottom hole pressure should not exceed 5100 psi.

All BOP testing will be done by an independent service company. Annular pressure tests will be limited to 50% of the working pressure. When nipping up on the 13-5/8" 5M bradenhead and flange, the BOP test will be limited to 5000psi. When nipping up on the 9-5/8", the BOP will be tested to a minimum of 5000 psi. All BOP tests will include a low pressure test as per BLM regulations. The 5M BOP diagrams are attached. Blind rams will be functioned tested each trip, pipe rams will be functioned tested each day.

See COA

A variance is requested to allow use of a flex hose as the choke line from the BOP to the Choke Manifold. If this hose is used, a copy of the manufacturer's certification and pressure test chart will be kept on the rig. Attached is an example of a certification and pressure test chart. The manufacturer does not require anchors.

6. PROPOSED MUD CIRCULATION SYSTEM:

See COA

INTERVAL	Hole Size	Mud Type	MW (ppg)	Viscosity (sec/qt)	Fluid Loss (cc)
0' to 1075' 1100	17-1/2"	FW/Native	8.4 - 8.8	35 - 40	NC
1075' to 4875'	12-1/4"	Brine/Gel Sweeps	9.8 - 10.2	30 - 32	NC
4875' to 12700' (Pilot Hole)	8-3/4"	FW / Cut Brine / Poly-Sweeps	8.6 - 10.0	29 - 32	NC - 20
4875' to 15615' (Curve/Lateral)	8-3/4"	FW / Cut Brine / Poly-Sweeps	8.6 - 9.0	29 - 32	NC - 20

The necessary mud products for weight addition and fluid loss control will be on location at all times.

Spud with fresh water/native mud. Drill out from under 13-3/8" surface casing with brine solution. A 9.8ppg-10.2ppg brine mud will be used while drilling through the salt formation. Use fibrous materials as needed to control seepage and lost circulation. Pump viscous sweeps as needed for hole cleaning. Pump speed will be recorded on a daily drilling report after mudding up. A Pason or Totco will be used to detect changes in loss or gain of mud volume. A mud test will be performed every 24 hours to determine: density, viscosity, strength, filtration and pH as necessary. Use available solids controls equipment to help keep mud weight down after mud up. Rig up solids control equipment to operate as a closed loop system.

7. AUXILIARY WELL CONTROL AND MONITORING EQUIPMENT:

- A. A Kelly cock will be in the drill string at all times.
- B. A full opening drill pipe stabbing valve having appropriate connections will be on the rig floor at all times.
- C. H2S monitors will be on location when drilling below the 13-3/8" casing.

8. LOGGING, CORING AND TESTING PROGRAM:

Mud Logger: Mud Logging Unit (2 man) on @ 4875'.
Catch 20' samples from 4875' to TD

Open hole logging to include Density/Neutron/PE/Dual Laterlog/Spectral Gamma from pilot hole TD to intermediate casing shoe.

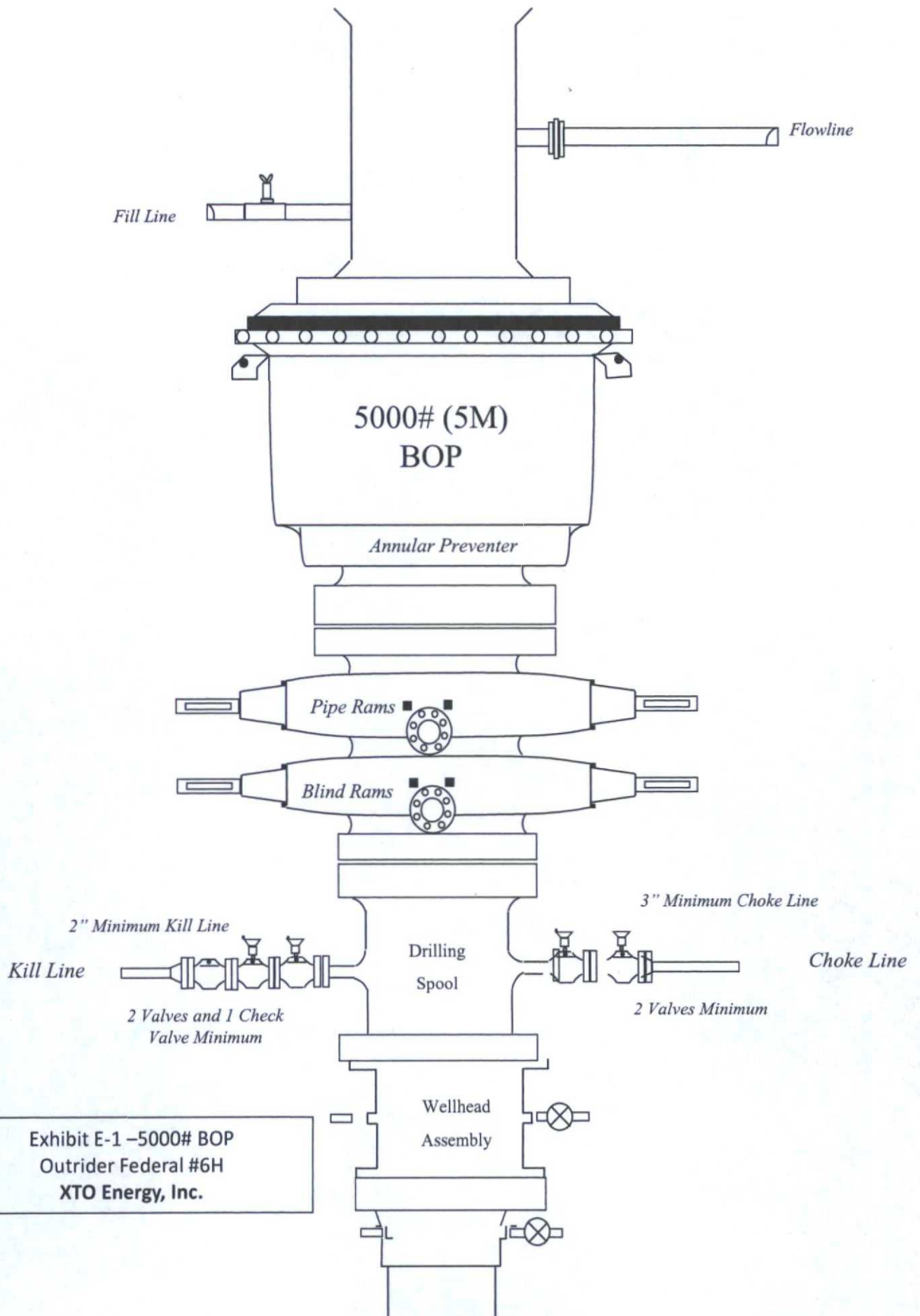
See COA

9. ABNORMAL PRESSURES AND TEMPERATURES / POTENTIAL HAZARDS:

None anticipated. BHT of 160 F is anticipated. No H2S is expected but monitors will be in place to detect any H2S occurrences. Should these circumstances be encountered the operator and drilling contractor are prepared to take all necessary steps to ensure safety of all personnel and environment. Lost circulation could occur but is not expected to be a serious problem in this area and hole seepage will be compensated for by additions of small amounts of LCM in the drilling fluid.

10. ANTICIPATED STARTING DATE AND DURATION OF OPERATIONS:

Road and location construction will begin after Santa Fe and BLM have approved the APD. Anticipated spud date will be as soon after Santa Fe and BLM approval and as soon as a rig will be available. Move in operations and drilling is expected to take 40 days. If production casing is run, an additional 30 days will be needed to complete well and construct surface facilities and/or lay flow lines in order to place well on production.



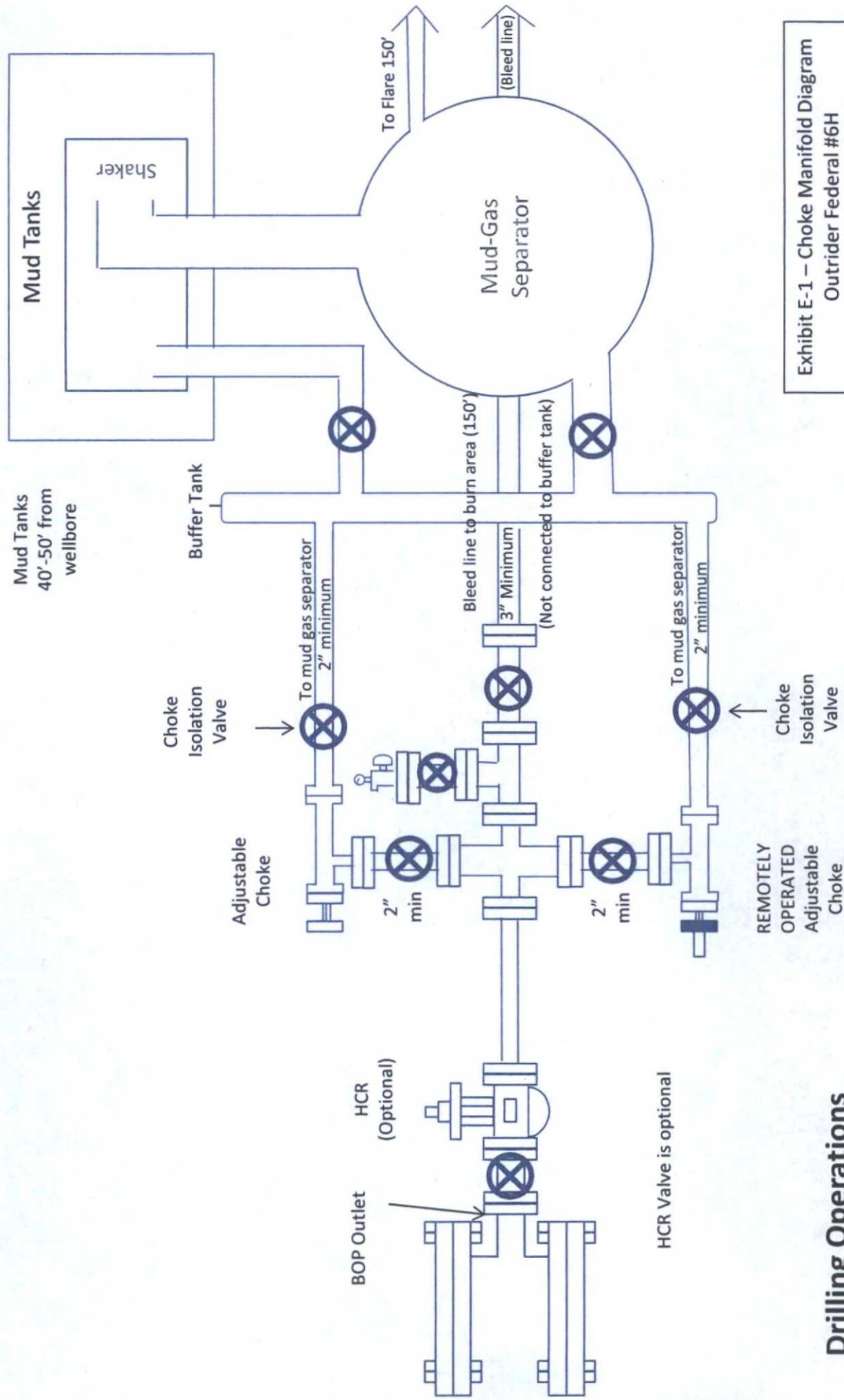


Exhibit E-1 – Choke Manifold Diagram
 Outrider Federal #6H
 XTO Energy, Inc..

Drilling Operations Choke Manifold